Chapter 8.

Issues for consideration

"No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable." (Adam Smith)

8.1. Lessons learned from the preparation of the present prototype report

There are thousands of relevant scientific assessments at various temporal and geographic scales. Most of them focus on specific systems and sectors. For example, there are 1,023 assessments in the database of the *Assessment of Assessments on Oceans* and 182 assessments at multiple scales in the database of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. These lists are growing and have to be updated on a regular basis.

Assessments differ greatly in terms of scope, scale, organization, process, participation, resources and perceived policy relevance (Table 6 in chapter 2). Three broad groups can be distinguished: intergovernmental scientific assessments; scientific-technocratic assessments; and scientific research collaborations. When asked about their preferred assessment model for future editions of the Global Sustainable Development Report, experts typically suggested either the conventional United Nations flagship publications model, a multiple stakeholder model with national contributions, or the IPCC model. Experts from developing countries tended to be more sceptical of the IPCC model, in view of its focus on peer-reviewed knowledge dominated by Western journals (accounting for 97 per cent of the references in IPCC reports).

Many countries and some regions have established processes to prepare sustainable development reports, many of which are supported by local scientific communities and feature local priorities. Hence, a bottom-up approach for the global Report would benefit from such rich and dispersed local policy-relevant knowledge.

Crowdsourcing proved a useful tool to identify new and emerging issues that scientists would like decision-makers to consider for action. The identified issues differed significantly from issues highlighted in the ad hoc expert group meetings and from issues identified by the young researchers. Hence, for a balanced result, the Global Sustainable Development Report may want to allow for a wide range of participation through multiple channels and feature a wide range of perspectives. Yet crowdsourcing has its limitations. Protocols for evaluating non-conventional sources of scientific knowledge might be needed.

The review of sustainable development progress provided evidence that impressive gains in some areas have come at the expense of worsening trends in other areas in recent decades. Hence, integrated assessment is needed to monitor interlinkages between issues and themes.

Scientific assessments of progress can sometimes lead to rather different results compared to institutional assessments of progress against agreed goals or commitments. Both are important, but are different in nature. Hence, a traditional monitoring report focused on progress towards SDGs might not by itself strengthen the science–policy interface, let alone strengthen the science–policy–society interface, which also requires involvement of stakeholders.

Views differ across Governments, civil society groups, academia and the public on the progress made, remaining gaps and ways forward towards sustainable development. Some of the differences arise from the adoption of different system boundaries and timescales, ranging from current, local actions all the way to the Earth's biota and a perspective of thousands of years. Interactions between system boundaries and timescales are non-trivial, and, in fact, policy recommendations derived from short-run and narrower approaches are often contradictory to those predicated on long-term, broader considerations.

A global scale and the time frame of the next two generations until 2050, together with intermediate milestones, has proven to be a reasonable choice for addressing - in an intergenerationally equitable way - many of the issues on the sustainable development agenda, such as eliminating poverty and hunger; enabling livelihoods; feeding, nurturing, housing and educating everyone; securing peace, security and freedom; and preserving the Earth's life-support systems.

Separate assessments and goals do already exist for all the thematic areas currently on the agenda of the OWG on SDGs. However, an integrated assessment is lacking that could identify alternative future pathways that resolve trade-offs and build synergies between policy actions. In this context, scenarios can be useful and help in reducing uncertainties over the required levels of investment and international cooperation for achieving SDGs. Hence, the Report might promote in-depth cooperation on sustainable development scenarios. Implementation of modern Integrated Sustainability Assessment (ISA) could be considered (see Box 8).

Scientists and United Nations entities have promoted a long list of sectoral as well as aggregate indicators. They have been developed with different objectives and organizational interests in mind. In particular, there has been no agreement on a comprehensive aggregate indicator of sustainable development progress that might complement GDP. Remote sensing and other big data approaches beyond official statistics show strong potential for assessing long-term sustainable development progress at various spatial and temporal scales, especially in the poorest parts of the world where official data are scarce.

Selected science digests might be a useful way to involve scientists in highly specialized fields to engage in the broader science–policy interface at the HLPF.

Case studies of the CLEWD nexus illustrate the benefits of integrated approaches focusing on issue clusters rather than sectors or themes. They can help in identifying innovative and better solutions. As the "right" cluster of issues for integrated policy is case-specific, future editions of the Global Sustainable Development Report might analyse and identify other important issue clusters. Looking at these issues in an integrated way may support efforts for more integrated decision-making.

Box 8. Integrated Sustainability Assessment

"*ISA is a cyclical, participatory process of scoping, envisioning, experimenting, and learning through which a shared interpretation of sustainability for a specific context is developed and applied in an integrated manner in order to explore solutions to persistent problems of unsustainable development.*"[383] ISA consists of iterative stages:

Scoping stage: This involves a problem definition and a context-specific interpretation of sustainability acceptable to stakeholders. It requires integrated systems analysis. The project team and stakeholders may have different perspectives arising from differences in norms, values and perceptions. Models and other tools can be useful to find common ground regarding the problem perception;[384]

Envisioning stage: Scenarios or visions explicitly aiming at sustainability are developed with the stakeholders. Most often a picture of a desirable future is developed first, and then pathways towards are elaborated it in a second step ("backcasting"). Stakeholder input can also be used to formulate policy options in the scenarios, and to make a first narrative assessment of the sustainability impacts of these proposals;

Experimenting stage: The sustainability visions and policy proposals are tested in terms of consistency, adequacy, robustness and feasibility. Transition pathways from drivers to sustainability goals, the sustainability impact of policy proposals, and trade-offs are tested and explored. Quantitative models and qualitative methods can be used, or options could be tested in real life. The knowledge of stakeholders can help to choose the appropriate set of tools and to ensure that the assessment is capable of answering questions that stakeholders think are important;

Learning, evaluating and monitoring stage: Learning experiences and lessons are made explicit. Besides internal evaluation, the views of the stakeholders are elicited. Evaluation of the composition of the stakeholder group and the methods of engagement also takes place at this stage.

The next ISA-cycle can potentially lead to a reframing of the shared problem perception, an adjustment of the sustainability vision and related pathways, and a reformulation of the experiments to be conducted.

Source: Authors' elaboration.

8.2. Selected issues

The following are selected issues for consideration on the overall direction.

Potential overall directions

In the future, the Global Sustainable Development Report could provide science-based inputs for deliberations of the HLPF. It can also contribute to the HLPF's agenda-setting by identifying new and emerging issues that would need addressing at the global level, as well as by identifying new developments in issues currently under consideration. It could also report on global progress in the achievement of the SDGs, once adopted in 2015. In addition, it could provide scientific evidence for linking global goals with the means to achieve them. Ultimately, the Report will help in improving the science–policy interface for sustainable development, as called for at Rio+20. Ideally, it might even contribute to improving the science–policy–society interface.

Regular assessment of assessments to identify common ground and different views

Decision-makers may want to task assessment processes, in the context of this assessment of assessments on sustainable development, not only to identify scientific consensus, but equally to focus on describing differences in view, including from minority groups of scientists, extending beyond the dominant peer-reviewed academic journals.

Various types of knowledge and many perspectives

Various types of knowledge and many perspectives could be taken into account, especially those of scientists in developing countries, including the poorest and most vulnerable countries. This requires taking into account a wider range of social and natural sciences as well as other sources of knowledge. It also requires going beyond the peer-reviewed literature to include local and traditional knowledge, including knowledge of practitioners. Eliciting the knowledge held by government officials and policymakers, and fostering closer interaction between the science and policymaking communities from the beginning of assessment processes, while also involving various stakeholders, would support the function of strengthening the science–policy–society interface.

Wide range of participation through multiple channels

A wide range of participation could be encouraged through multiple channels. Tapping into the expertise of the whole United Nations system and a wide range of scientific communities will be important. In order to allow for participation by a wide range of scientists and stakeholders, multiple channels of input should be open, such as through crowdsourcing using online and offline methods. Protocols for evaluating such non-conventional sources of scientific knowledge will be needed.

New technologies and approaches

The full range of new technologies and methodologies might be employed not only to facilitate participation in scientific assessments but also possibly for monitoring progress. Examples include monitoring sustainable development progress from space (by combining remote sensing with other data) and employing multiple methodologies and approaches, for example, for aggregate measures of sustainable progress beyond GDP. Different methodologies can lead to rather different conclusions, as illustrated in the full report with the case of monitoring poverty trends. Ethical aspects might also be considered.

United Nations institutional platform for sustainable development models and scenarios

The present report argues for a major effort to draw on the wider range of global modelling capabilities, in order to assess various sets of sustainable development objectives and eventually the set of SDGs ultimately agreed by Member States, and to explore pathways towards their achievement, including in terms of technology and financing needs. A United Nations institutional home, or platform, for SDG-related scenarios and global models could prove beneficial, especially if it is connected to the Global Sustainable Development Report. The Report could look at other clusters of strongly-interlinked issues, in addition to the CLEWD nexus, which would benefit from an inter-agency capacity-building initiative to support national planners.

This would provide a direct link between global and national policy, fostering joint action and mutual learning.

Multi-stakeholder approach

The United Nations "SD21 study" in preparation for Rio+20 provided a good basis for future sustainable development reports. In particular, it provided elements of a multi-stakeholder approach to coherently address sustainable development at all relevant levels. The suggested framework takes into account the wide range of different perspectives and values of stakeholders, yet it aims to support coherence of actions for sustainable development at all levels. Annex 7 provides elements of the framework.

8.3. Options for scope and methodology of a Global Sustainable Development Report

Finally, several options are put forward for the scope and methodology of the Report. These options are based on responses by Member States and United Nations system entities to a questionnaire on the subject (Annex 6), and also draw on lessons learned from the exploratory, multi-stakeholder process to produce the present prototype. The options have been recommended by the United Nations Secretary-General in his report *Options for scope and methodology of a global sustainable development report* which was prepared pursuant to United Nations General Assembly resolution A/RES/67/290 of 9 July 2013 on the "Format and organizational aspects of the High-level Political Forum on sustainable development".

Member States, the United Nations system and many scientists already agree on many of the elements that define the scope and methodology of a Global Sustainable Development Report. These elements are summarized in Table 45 and could be considered in the way forward.

Taking into account the different views on a number of elements, the following options could be considered (Table 46).

- Option 1: Conventional United Nations flagship publication model
- Option 2: Multi-stakeholder model linked to voluntary national processes
- Option 3: Intergovernmental Panel on Sustainable Development.

Option 1 follows the conventional approach for United Nations flagship publications. The Report is drafted by United Nations staff, who also select experts for ad hoc contributions. Knowledge inputs comprise peer-reviewed literature and United Nations system expertise. The Report is peer-reviewed internally and approved by senior United Nations management. Inputs from Member States and stakeholders are based on ad hoc requests and based entirely on existing United Nations structures, including those of the Regional Commissions. Advantages of Option 1 include its low cost (can be implemented within existing resources), quick turnaround times, no need for new structures or working methods, and the representation of a wide range of perspectives. Disadvantages include limited consultations, weak linkages to existing assessments and initiatives, and a potential for overlapping activities.

Option 2 goes further in terms of involving stakeholders and linking to voluntary national reviews. The Report would be drafted by a team of United Nations staff comprising all UN-ECESA Plus members, with contributions from scientists, government officials and stakeholders. The Report would undergo an external, multi-stakeholder peer-review process and be approved by United Nations senior management and/or a multi-stakeholder advisory group. Advice would be provided by representatives of academia, major groups, the United Nations system and other international organizations. This might include the chairs of major international assessment initiatives (e.g. IPCC, IPBES), research programmes (e.g. SDSN, Future Earth), and academies of sciences (e.g. World Academy of Sciences, prominent national academies); representatives of major groups (ICSU, ISSC, World Business Council for Sustainable Development); and young scientists; chairs of key United Nations groups (e.g. CDP, the London Group, Secretary-General's Scientific Advisory Board, SEA4ALL, GEO board); representatives of key United Nations reports and outlooks (UN Regional Commissions, UNCTAD, UNEP, UNESCO, UNDP, World Bank, IMF, CBD, UNFCCC); and representatives of relevant

Table 45. Common elements of majority agreement on scope and methodology of the Global Sustainable Development Report

Element	Agreement
Value added	Easy access for decision-makers to findings of many scientific assessments; highlight synergies and trade-offs between policy actions in various settings
Focus	Focus on implementation, obstacles to progress, good practises of integrated policy
Capacity needs	Joint United Nations effort to support developing countries' participation
Audience	Policymakers, senior government officials and wide range of stakeholders
Scope in terms of issue focus	Priority issues identified in the Rio process, including *Agenda 21*, the Rio+20 outcome, as well as other internationally agreed goals and commitments; supports HLPF and implementation of future SDGs and post-2015 development agenda
Geographic scope	Global and five United Nations regions, with analysis for groups of countries in special situations
Time horizon	Medium- (10 years) to Long-term (20 to 50 years)
Global issues covered	HLPF agenda, Rio+20 outcome document, *Agenda 21*, future SDGs and post-2015 development agenda
New and emerging issues	Identification based on sound scientific evidence
Coordination of report process	United Nations task team coordinated by the HLPF Secretariat (UN DESA's Division for Sustainable Development) at the global level and Regional Commissions at the regional level
Type of content	Past and future trends; lessons learned; scientific findings indicating potential areas for policy action; opportunities and challenges for implementation
Periodicity	In-depth report every four years coinciding with HLPF sessions under the United Nations General Assembly, and focused report contributions for the HLPF sessions under the auspices of the Economic and Social Council
Normative or descriptive	Policy-relevant content and options, but not normative policy recommendations
Monitoring and accountability framework for SDGs/post-2015 development agenda	The Report possibly to become one of several contributions to the framework; details are to be decided after 2015
Scientific methods	Multidisciplinary, integrated approach in the spirit of sustainability science; precise methods to be decided by scientists, but prototype report illustrates a useful basis on the methodological side for future editions
How to inform the work of the HLPF	To be integrated in and provide scientific evidence for the deliberations of the HLPF; the Report to become one of several inputs

Source: Authors' elaboration based on the Report of the Secretary-General, E/2014/87.

non-United Nations organizations (South Centre, OECD, regional development banks, European Commission). United Nations regional commissions are encouraged to hold regional consultations and prepare contributions to the Report. Existing national processes and/or voluntary national reviews under HLPF will become important partners. Most activities under Option 2 could be implemented within existing resources with in-kind contributions, but additional resources might be needed for expert participation and capacity support to ensure effective participation of developing countries. Advantages include higher legitimacy, moderate cost, and strong linkages between international assessments, national reviews and policymaking. Disadvantages include longer turnaround times due to extensive consultations and limited acceptance by certain scientific communities.

Option 3 follows an IPCC-style model in which Member States nominate scientific experts to a writing team, which drafts the Report to be adopted by Member States. Cooperation agreements may be sought with existing assessment initiatives. Lessons-learned from IPCC reviews can be taken into account in the design of the Panel. In particular, there may be a need to compensate authors for their contributions, in order to avoid conflicts of interests. Advantages of Option 3 include a larger mobilization of scientific communities and of resources, and an institutionalized science–policy interface. Disadvantages include a higher cost (similar to those of other intergovernmental panels), inertia in the process due to a very large number of scientists involved, as well as the fact that the IPCC's consensus model based on peer-reviewed literature does not necessarily encourage the presentation of emerging issues or diverse views.

Table 46. Overview of differences between the three options

Element	Option 1: Conventional United Nations flagship publication model	Option 2: Multi-stakeholder model linked to voluntary national processes	Option 3: Intergovernmental Panel on Sustainable Development
Report drafted by	United Nations staff	Team of United Nations staff with contributions from scientists, government officials and stakeholders	Scientists nominated by Member States
Experts selected by	United Nations staff	United Nations staff, assessment initiatives, Member States, major groups	Member States
Peer-review	Internal to the United Nations system	External, multi-stakeholder peer review (open process) including the United Nations system	Peer review by participating scientists and external academic reviewers
Report approved by	United Nations senior management	United Nations senior management and/or multi-stakeholder advisory group	Member States
Scope of scientific knowledge	Peer-reviewed literature and United Nations system knowledge	All kinds of knowledge	Peer-reviewed literature
Regional priority issues identified by	Regional consultations coordinated by Regional Commissions	Multi-stakeholder regional consultations coordinated by Regional Commissions	Scientists
National priority issues identified by	Responses by Member States to United Nations questionnaires	Voluntary, national consultations coordinated by Member States and supported by United Nations capacity-building	Scientists
How to organize national and regional contributions	Desk study conducted by United Nations staff and inputs through ad hoc United Nations request for inputs; based on existing structures	Based on existing structures using existing focal points or channels for nominations; organized by interested Member States with capacity support from the United Nations system	New, formal group of scientists nominated by Member States
Choosing thematic focus of each edition	United Nations senior management	HLPF in consultation with scientists and stakeholders	HLPF
National sustainable development process	No direct link	Partly based on voluntary processes and reports	No direct link
Scientific advisory group or working group	United Nations internal with ad hoc external contributions	Multi-stakeholder group, including representatives of academies of sciences, Scientific Advisory Board, CDP, and of key international assessments	New group of scientists nominated by Governments

Source: Authors' elaboration based on the Report of the Secretary-General, E/2014/87.